

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11		
Spring	Number: Decimals		Ratio	Number: Fractions		Algebra	Measurement: Converting units Perimeter, area, volume			Revision Statistics			
	CSM 225-229 Associate a fraction with division and calculate decimals [for example, 0.375 for a simple fraction eg 3/8]. Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000. Multiply one-digit numbers with up to two decimal places by whole numbers. Use written division methods where the answer has up to two decimal places. Solve problems rounding to specified degrees of accuracy		CSM 234 Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	CSM 231-234 Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison. Solve problems involving similar shapes where the scale factor is known or can be found.		CSM 235-239 Use simple formulae Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns. Enumerate possibilities of combinations of two variables.	CSM 240-246 Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places. Week 8 Convert between miles and kilometres. Recognise that shapes with the same areas can have different perimeters and vice versa. Calculate the area of parallelograms and triangles. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units [for example, mm ³ and km ³].			CSM 254-255 Interpret and construct pie charts and line graphs and use these to solve problems. Calculate and interpret the mean as an average			

Summer	Revision (to include fractions, and 4 operations) Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. Solve problems which require answers to be rounded to specified degrees of accuracy. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Compare and order fractions, including fractions greater than 1. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2}$ Divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]. Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]. Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places Multiply one-digit numbers with up to two decimal places by whole numbers.				themed projects Statistics CSM 240 Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. CSM 254-255 Interpret and construct pie charts and line graphs and use these to solve problems. Calculate and interpret the mean as an average			

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Key Learning

- Extend their understanding of the number system and place value to include larger integers.
- Develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio. Develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation.
- Understand the language of algebra as a means for solving a variety of problems.
- Classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them. Read, spell and pronounce mathematical vocabulary correctly.
 - Fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

Cultural Capital

Opportunity to transfer mathematical knowledge, conceptual understanding and mathematical skills through Educational Visits (Residential).
 Maths Outside the Classroom opportunities taken around the school grounds, especially geometry and measurement.
 By creating meaningful contexts for pupils to understand and apply their learning.
 By creating opportunities for pupils to solve a range of problems in real life and abstract contexts.

Vocational Links

Link Super 7 key figures where possible to maths/ science

Essential Vocabulary

millions negative addition subtraction multiplication division remainder factor multiple estimate fraction numerator denominator mixed number improper fraction equivalent coordinate grid quadrant axes	decimal decimal fraction percentage equivalent fraction algebra formula sequence equation variable measure length weight capacity time perimeter area cube cuboid ratio	vertex radius diameter circumference parallel perpendicular protractor data interpret average addition subtraction multiplication division remainder factor multiple estimate sequence equation
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Year 6 Overview